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Rissoa (Turgidina) testudae subg. nov., sp. nov., a marine gastropod from the Straits of Gibraltar

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Rissoa (Turgidina) testudae[1] sp. nov. (fig. 2)

Shell with short conical spire, vitreous, glossy. Height 1.90 mm, width 1.17 mm. There is a narrow but distinct umbilicus.

Apex. – The diameter of the nucleus *d* is about 0.12 to 0.14 mm, that of the first half whorl *D* about 0.21 to 0.23 mm, see fig. 1.

Whorls. – There are 4.5 very inflated, evenly rounded whorls, which are almost disconnected. See fig. 1 for the method of whorl counting.

Sculpture. – The longitudinal ribs cover about 2.5 whorls, including the whole of the body whorl. They number about 13 on the ultimate whorl, and about 12 on the penultimate one. The ribs continue downwards as far as the umbilicus, and are about straight and vertical. They are about as wide as they are high. The width of the interstices is nearly twice that of the ribs. The labial rib cannot be distinguished from the other ribs, neither by form or dimensions, nor by the distance to the next longitudinal rib. It is possible, however, that none of the shells examined is completely full-grown. In some shells, three close-set spiral striae can be seen between the longitudinal ribs, slightly below the periphery of the shell.

Aperture. – Nearly completely circular, with continuous peristome. Height 0.72 mm.

Colour. – The shells are colourless and vitreous.

R. testudae is only known with certainty from Tarifa, S. Spain, and from Tangier, NW. Morocco.

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[1] Dedicated to Mlle. Anne Marie Testud of the Paris museum, as promised in Amsterdam, 12.IV.1978.

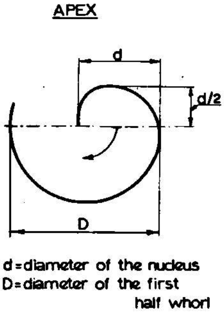

Fig. 1. Definition of the apical dimensions and of the way the number of whorls has been counted.

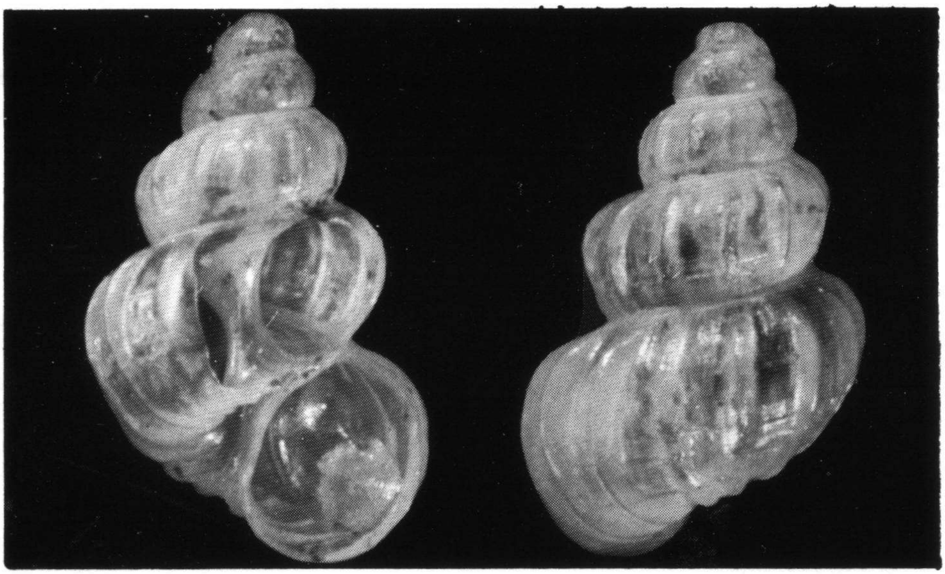

Fig. 2. *Rissoa (Turgidina) testudae* sp. nov. Holotype from Tarifa, S. Spain. Height 1.9 mm, ca. 40 x, in Rijksmuseum van Natuurlijke Historie, Leiden, No. 55367.

The following material was examined:

– one adult shell (the holotype, RMNH No. 55367), and two juvenile shells (RMNH No. 55368) of *R. testudae*, washed ashore on the sandy beach at Tarifa, Spain. This sample is deposited in the Rijksmuseum van Natuurlijke Historie, Leiden.

– one shell of *R. testudae* in the Dautzenberg colln., Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels, labelled "Rissoa turricula Jeffreys/Baie de Tanger 7br/Chaster ded. 20.2.97".

– two shells of *R. turrita* (Monterosato, 1890) (= *Rissoa turricula* Jeffreys, 1884, not Eichwald, 1830) in the British Museum (Natural History), labelled "Rissoa turricula Jeffr./Syntypes/B.M.(N.H.) Reg. No. 1885.11.5.1777-8". These are of Atlantic origin, and were collected by the Porcupine expedition.

R. testudae is very similar indeed to *R. turrita*. However, it clearly differs in the larger apical dimensions, i.e. 0.12/0.21 to 0.14/0.23 mm, as compared with 0.09/0.15 mm (the first one of each pair of measurements denotes the diameter of the nucleus, the second one that of the first half whorl, see fig. 1), and in the lower number of ribs per whorl, i.e. 13 as compared to 20-25 as mentioned by Jeffreys (1884: 120) for *R. turrita*. I regret not to be able to affirm Jeffreys' observation, because I did not succeed in reliably counting the ribs of his shells, which are in mediocre condition, and glued to a piece of paper. For reasons explained elsewhere (Verduin, 1977), however, I feel that the differences in apical dimensions alone suffice to distinguish two species of the genus *Rissoa*.

Judging from the fact that (1) all specimens examined from the Straits of Gibraltar belong to *R. testudae*, including (2) the specimen ex Chaster in the Dautzenberg collection, it is very likely that Pallary's (1902: 18) record of "Rissoa (Sabanea) turricula, Jeffreys (Coll. Chaster)" from Tangier in reality refers to the new species. Subsequent records from the latter locality by Pallary (1912: 50) and Pasteur-Humbert (1962: 141) may well refer to the same record.

Different authors have placed the closely related species *R. turrita* in different genera or subgenera: Monterosato (1890: 146) in *Pusillina* Monterosato, 1884; Pallary (1902: 18) in *Sabanea*, an incorrect spelling of *Sabanaea* Leach (in Gray, October 1847); Nordsieck (1972: 198) in *Benzia* Nordsieck, 1972.

Pusillina is monotypic, with *Rissoa dolium* Nyst, 1843 the type species. The type species of *Benzia* is *Rissoa benzi* (Aradas & Maggiore, 1843). From the context in which it is used, it is perfectly clear that *Sabanea* Gray (November 1847: 152 and 159) is a subsequent incorrect spelling of *Sabanaea* Leach, which is now a junior objective synonym of *Cingula* Fleming, 1818, see Verduin (1976: 22) and Van Aartsen & Verduin (1978: 28). Monterosato (1884: 138) mentioned Leach as the author of *Sabanea*. Because Leach has never used this spelling, this must also be a subsequent incorrect spelling of *Sabanaea*. Pallary must have overlooked the fact that Monterosato had assigned *R. turrita* to the genus *Pusillina*, for there can be no doubt that he did not have the intention to introduce *Sabanea* as a new taxon, but simply followed Monterosato's paper from 1884. The other species which he placed in *Sabanea*, and the ample use he made of many new generic names which Monterosato had introduced simultaneously with *Sabanea*, are there to prove this, see Pallary, 1912.

In my opinion, the similarity between the shells of *R. dolium*, *R. benzi* and all species which Monterosato included in *Sabanea* is such that they should be assigned to one subgenus only, viz. *Turboella* Gray, 1847. Because there can be no doubt that Pallary used the subgenus *Sabanea* in Monterosato's sense, it must be concluded that all three authors, i.e. Monterosato, Pallary and Nordsieck, associated *R. turrita* with species which I (Verduin, 1976) included in *Turboella*. *R. testudae*, however, differs rather strikingly from all species included by me in *Turboella* in: (1) the presence of a narrow but deep and distinct umbilicus, (2) the longitudinal ribs continuing as far downwards as the umbilicus, and (3) the extremely inflated whorls. It therefore seems sensible to place it in a separate subgenus, *Turgidina*, with the type species *Rissoa testudae*. Of course, *R. turrita* also belongs to this new subgenus.

I am much indebted to Mrs. K.M. Way of the British Museum (Natural History) for sending me the specimens of *R. turrita* for examination, and to Dr. J. van Goethem of the Koninklijk Belgisch Instituut voor Natuurwetenschappen for hospitality.

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SAMENVATTING

Rissoa (Turgidina) testudae subg. nov., sp. nov., een zeeslak van de Straat van Gibraltar

R. testudae vertoont veel gelijkenis met *R. turrita* (Monts., 1890) (= *R. turricula* Jeffreys, 1884, non Eichwald, 1830), doch verschilt als volgt:

— De apicale windingen zijn grover, 0,12/0,21 tot 0,14/0,23 mm bij *R. testudae* en 0,09/0,15 mm bij *R. turrita*. Het eerste van elk paar getallen geeft de grootte van de maat *d* in fig. 1., het tweede die van *D*.

— Het aantal ribben op de laatste winding is 13, en niet 20-25 zoals Jeffreys van *R. turrita* vermeldt.

R. testudae past niet in een der bekende subgenera omdat er een duidelijke, diepe (zij het nauwe) navel aanwezig is, omdat de ribben tot onderaan de schelp doorlopen en omdat de windingen zo extreem opgeblazen zijn. Derhalve wordt een nieuw subgenus, *Turgidina*, voorgesteld, met *R. testudae* als type soort.

Er zijn nog niet meer dan vier schelpen van de nieuwe soort bekend, drie van Tarifa (Z. Spanje) en een van Tanger.